Serial No.: 10/659,874
Filed: September 9, 2003

Page : 2 of 22

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

 (Currently Amended) A method <u>performed in a document management system</u> of controlling access to an electronic document, comprising:

receiving at a document management system a request from a first user for an electronic document at a first user location, the document management system storing a rendition of the electronic document being stored in a document repository, the document management system maintaining a set of access policies for the electronic document, the set of access policies including access policies for a plurality of users, each user having an identity on the document management system, the document management system authenticating users based on the users' identities, the document having multiple renditions, the access policies applying to the document and the multiple renditions of the document in the document management system;

authenticating the first user at the document management system using [[a]] the set of access policies for the electronic document;[[,]] the set of access policies including access policies for a plurality of users;

verifying that the first user is authorized to obtain the electronic document, and then when the first user is authorized to obtain the electronic document, passing an encrypted rendition of the electronic document to the first user:

receiving at the document management system a request from a [[the]] second user for access to the encrypted rendition, where the second user received the encrypted rendition from the first user;

authenticating the second user at the document management system[[,]] using the set of access policies[[,]] to establish which operations the second user is allowed to perform on the encrypted rendition;

creating, at the document management system, a voucher for accessing the encrypted rendition, the voucher including the set of access policies for controlling access to the encrypted

Serial No.: 10/659,874 Filed: September 9, 2003

Page : 3 of 22

rendition of the electronic document, the voucher further including an electronic key operable to decrypt the encrypted rendition of the electronic document; and

passing the electronic voucher to the second user located at a second user location.

2. (Original) The method of claim 1, further comprising:

creating, at the document management system, the encrypted rendition using the rendition that is stored in the document repository.

3. (Original) The method of claim 1, wherein creating a voucher comprises:

obtaining the set of access policies for the second user from an access control list that is associated with the electronic document; and

including the obtained set of access policies in the electronic voucher.

4. (Original) The method of claim 1, wherein the set of access policies for the electronic document identify one or more of the following operations:

adding content to the rendition, adding comments to the rendition, applying a digital signature to the rendition, saving the rendition, printing the rendition, importing form data into the rendition, exporting form data from the rendition, and transmitting the rendition to another user.

- (Previously Presented) The method of claim 1, where the set of access policies include: a list of application rights.
- 6. (Original) The method of claim 1, further comprising:

including expiration information in the electronic voucher prior to passing the electronic voucher to the second user location.

7. (Original) The method of claim 6, wherein the expiration information includes one or more of:

a predetermined number of access operations before the voucher expires, a particular time period before the voucher expires, and a particular time when the voucher expires.

Serial No.: 10/659,874 Filed: September 9, 2003

Page : 4 of 22

8. (Original) The method of claim 2, wherein:

providing the encrypted rendition includes providing the encrypted rendition from a location other than the document repository.

- 9. (Cancelled)
- (Original) The method of claim 1, wherein the rendition is a Portable Document Format document.
- 11. (Original) The method of claim 1, further comprising: recording information relating to the request in an audit trail for the electronic document.
- 12. (Original) The method of claim 1, wherein the first user and the second user are the same individual.
- 13. (Original) The method of claim 1, wherein the first user location and the second user location are identical.
- 14. (Currently Amended) A method of accessing an electronic document, comprising:
 requesting, from a document management system, access to an electronic document for a
 user at a user location, one or more renditions of the electronic document being stored in a
 document repository in the document management system, the document management system
 maintaining a set of access policies for the electronic document, the set of access policies
 including access policies for a plurality of users, each user having an identity on the document
 management system, the document management system authenticating users based on the users'
 identities, the document having multiple renditions, the access policies applying to the document
 and the multiple renditions of the document, wherein requesting access to an electronic
 document for a user at a user location includes providing authentication information to
 authenticate the user to the document management system:

receiving at the user location an electronic voucher from the document management system for the electronic document, the electronic voucher including a set of access policies for accessing an encrypted rendition of the electronic document, the set of access policies including

Serial No.: 10/659,874 Filed: September 9, 2003

Page : 5 of 22

access policies for a plurality of users, and an electronic key operable to decrypt the encrypted rendition of the electronic document: and

using the electronic key of the electronic voucher at the user location to decrypt the encrypted rendition of the electronic document according to the set of access policies <u>for accessing</u> the encrypted rendition of the electronic document.

15. (Original) The method of claim 14, further comprising:

determining whether the encrypted rendition of the electronic document is available at the user location:

wherein, if it is determined that the encrypted rendition is available at the user location, requesting access includes:

extracting from the encrypted rendition a reference to the document repository where one or more renditions of the electronic document are stored; and

requesting access to the rendition from the document repository identified by the extracted reference.

16. (Original) The method of claim 15, wherein:

the encrypted rendition includes a document identifier and the reference to the document repository includes a path for accessing the document repository over a computer network; and requesting access includes:

retrieving the document identifier and the path from the encrypted rendition; and sending an access request to the document repository specified by the retrieved path, the access request including the document identifier.

17. (Cancelled)

18. (Currently Amended) The method of claim [[17]] 14, wherein the set of access policies include information indicating that a user at the user location is authorized to perform one or more of the following operations:

adding content to the electronic document, adding comments to the electronic document, applying a digital signature to the electronic document, saving the electronic document, printing

Serial No.: 10/659,874 Filed: September 9, 2003

Page : 6 of 22

the electronic document, importing form data into the electronic document, exporting form data from the electronic document, and transmitting the electronic document to another user.

19. (Currently Amended) The method of claim [[17]] 14, further comprising:

verifying, at the user location, that one or more requested operations are allowed by the set of access policies for the electronic document.

- 20. (Cancelled)
- 21. (Original) The method of claim 14, wherein:

the electronic voucher further includes a set of application rights, the application rights being operable to enable one or more disabled operations in an electronic document software application at the user location.

- (Original) The method of claim 14, wherein the rendition is a Portable Document Format document.
- 23. (Original) The method of claim 14, further comprising: storing the received voucher at the user location.
- 24. (Original) The method of claim 14, wherein receiving an electronic voucher comprises: determining whether an electronic voucher is stored locally at the user location; and if the electronic voucher is stored locally, retrieving the electronic voucher from the local storage;

if the electronic voucher is not stored locally, requesting an electronic voucher from the document management system.

- (Original) The method of claim 14, further comprising:
 receiving an encrypted rendition of the electronic document.
- 26. (Original) The method of claim 14, wherein:

the voucher includes expiration information including one or more of: a predetermined number of access operations before the voucher expires, a particular time period before the

Serial No.: 10/659,874 Filed: September 9, 2003

Page : 7 of 22

voucher expires, and a particular time when the voucher expires.

 (Currently Amended) A method for controlling access to an electronic document, comprising;

receiving at a document management system a request from a user for access to an electronic document at a user location, a rendition of the electronic document being stored in a document repository in the document management system, the document management system maintaining a set of access policies for the electronic document, the set of access policies including access policies for a plurality of users, each user having an identity on the document management system, the document management system authenticating users based on the users' identities, the document having multiple renditions, the access policies applying to the document and the multiple renditions of the document;

authenticating the user at the document management system[[,]] to verify that the user is authorized to access the electronic document; wherein.

when the user is authorized to access the electronic document,

creating, at the document management system, an encrypted rendition of the electronic document using the rendition of the electronic document that is stored in the document repository;

creating, at the document management system, a voucher for accessing the encrypted rendition, the voucher including a set of access policies for controlling access to the encrypted rendition of the electronic document, the set of access policies including access policies for a plurality of users, the voucher further including an electronic key operable to decrypt an encrypted rendition of the electronic document; and

passing the <u>encrypted rendition of the electronic document and the</u> electronic voucher to the user location.

28. (Currently Amended) A computer program product, tangibly embodied in a machine-readable storage device, stored on a computer-readable medium; for controlling access to an electronic document, comprising instructions operable to cause a programmable processor to:

Attorney's Docket No.: 07844-609001 / P562

Applicant: Bill Shapiro et al. Serial No.: 10/659,874 Filed: September 9, 2003

Page : 8 of 22

receive at a document management system a request from a first user for an electronic document at a first user location, the document management system storing a rendition of the electronic document being stored in a document repository, the document management system maintaining a set of access policies for the electronic document, the set of access policies including access policies for a plurality of users, each user having an identity on the document management system, the document management system authenticating users based on the users' identities, the document having multiple renditions, the access policies applying to the document and the multiple renditions of the document in the document management system;

authenticate the first user at the document management system[[,]] using [[a]] the set of access policies for the electronic document [[,]] the set of access policies including access policies for a plurality of users;

verify that the first user is authorized to obtain the electronic document, [[:]] and then when the first user is authorized to obtain the electronic document, pass an encrypted rendition of the electronic document to the first user;

receive at the document management system a request from a second user for access to the encrypted rendition, where the second user received the encrypted rendition from the first user:

authenticate the second user at the document management system[[,]] using the set of access policies[[,]] to establish which operations the second user is allowed to perform on the encrypted rendition;

create, at the document management system, a voucher for accessing the encrypted rendition, the voucher including the set of access policies for controlling access to the encrypted rendition of the electronic document, the voucher further including an electronic key operable to decrypt the encrypted rendition of the electronic document; and

pass the electronic voucher to the second user located at a second user location.

29. (Original) The computer program product of claim 28, further comprising instructions to: create, at the document management system, the encrypted rendition using the rendition that is stored in the document repository.

Serial No.: 10/659,874 Filed: September 9, 2003

Page : 9 of 22

30. (Original) The computer program product of claim 29, wherein the instructions to create a voucher comprise instructions to:

obtain the set of access policies for the second user from an access control list that is associated with the electronic document; and

include the obtained set of access policies in the electronic voucher.

31. (Original) The computer program product of claim 29, wherein the set of access policies for the electronic document identify one or more of the following operations:

adding content to the rendition, adding comments to the rendition, applying a digital signature to the rendition, saving the rendition, printing the rendition, importing form data into the rendition, exporting form data from the rendition, and transmitting the rendition to another user.

32. (Previously Presented) The computer program product of claim 29, where the set of access policies include:

a list of application rights.

33. (Currently Amended) The computer program product of claim 29, further comprising instructions to:

include expiration information in the electronic voucher prior to passing the electronic voucher to the $\underbrace{second}_{}$ user location.

34. (Original) The computer program product of claim 33, wherein the expiration information includes one or more of:

a predetermined number of access operations before the voucher expires, a particular time period before the voucher expires, and a particular time when the voucher expires.

35. (Original) The computer program product of claim 28, wherein:

the instructions to provide the encrypted rendition include instructions to provide the encrypted rendition from a location other than the document repository.

(Cancelled)

Serial No.: 10/659,874 Filed: September 9, 2003

Page : 10 of 22

 (Original) The computer program product of claim 28, wherein the rendition is a Portable Document Format document.

- (Original) The computer program product of claim 28, further comprising instructions to:
 record information relating to the request in an audit trail for the electronic document.
- 39. (Original) The computer program product of claim 28, wherein the first user and the second user are the same individual.
- 40. (Original) The computer program product of claim 28, wherein the first user location and the second user location are identical.
- 41. (Currently Amended) A computer program product, tangibly embodied in a machine-readable storage device, stored on a computer readable medium, for accessing an electronic document, comprising instructions operable to cause a programmable processor to:

request, from a document management system, access to an electronic document for a user at a user location, one or more renditions of the electronic document being stored in a document repository in the document management system, the document management system maintaining a set of access policies for the electronic document, the set of access policies including access policies for a plurality of users, each user having an identity on the document management system, the document management system authenticating users based on the users' identities, the document having multiple renditions, the access policies applying to the document and the multiple renditions of the document, wherein requesting access to an electronic document for a user at a user location includes providing authentication information to authenticate the user to the document management system;

receive at the user location an electronic voucher from the document management system for the electronic document, the electronic voucher including a set of access policies for accessing the encrypted rendition of the electronic document, the set of access policies including access policies for a plurality of users, and an electronic key operable to decrypt the encrypted rendition of the electronic document; and

use the electronic key of the electronic voucher at the user location to decrypt the

Serial No.: 10/659,874 Filed: September 9, 2003

Page : 11 of 22

encrypted rendition of the electronic document according to the set of access policies <u>for</u> accessing the encrypted rendition of the electronic document.

42. (Original) The computer program product of claim 41, further comprising instructions to: determine whether the encrypted rendition of the electronic document is available at the user location:

wherein, if it is determined that the encrypted rendition is available at the user location, requesting access includes instructions to:

extract from the encrypted rendition a reference to the document repository where one or more renditions of the electronic document are stored; and

request access to the rendition from the document repository identified by the extracted reference.

43. (Original) The computer program product of claim 42, wherein:

the encrypted rendition includes a document identifier and the reference to the document repository includes a path for accessing the document repository over a computer network; and the instructions to request access include instructions to:

retrieve the document identifier and the path from the encrypted rendition; and send an access request to the document repository specified by the retrieved path, the access request including the document identifier.

44. (Cancelled)

45. (Currently Amended) The computer program product of claim [[44]] 41, wherein the set of access policies include information indicating that a user at the user location is authorized to perform one or more of the following operations:

adding content to the electronic document, adding comments to the electronic document, applying a digital signature to the electronic document, saving the electronic document, printing the electronic document, importing form data into the electronic document, exporting form data from the electronic document, and transmitting the electronic document to another user.

46. (Currently Amended) The computer program product of claim [[44]] 41, further comprising

Serial No.: 10/659,874 Filed: September 9, 2003

Page : 12 of 22

instructions to:

verify, at the user location, that one or more requested operations are allowed by the set of access policies for the electronic document.

47. (Cancelled)

48. (Original) The computer program product of claim 41, wherein:

the electronic voucher further includes a set of application rights, the application rights being operable to enable one or more disabled operations in an electronic document software application at the user location.

- 49. (Original) The computer program product of claim 41, wherein the rendition is a Portable Document Format document.
- (Original) The computer program product of claim 41, further comprising instructions to: store the received voucher at the user location.
- 51. (Original) The computer program product of claim 41, wherein the instructions to receive an electronic voucher comprise instructions to:

determine whether an electronic voucher is stored locally at the user location; and if the electronic voucher is stored locally, retrieving the electronic voucher from the local storage;

if the electronic voucher is not stored locally, request an electronic voucher from the document management system.

- 52. (Original) The computer program product of claim 41, further comprising instructions to: receive an encrypted rendition of the electronic document.
- 53. (Original) The computer program product of claim 41, wherein:

the voucher includes expiration information including one or more of: a predetermined number of access operations before the voucher expires, a particular time period before the voucher expires, and a particular time when the voucher expires.

Serial No.: 10/659,874 Filed: September 9, 2003

Page : 13 of 22

54. (Currently Amended) A computer program product, tangibly <u>embodied in a machine-readable storage device, stored on a computer readable medium,</u> for controlling access to an electronic document, comprising instructions operable to cause a programmable processor to:

receive at a document management system a request from a user for access to an electronic document at a user location, a rendition of the electronic document being stored in a document repository in the document management system, the document management system maintaining a set of access policies for the electronic document, the set of access policies including access policies for a plurality of users, each user having an identity on the document management system, the document management system authenticating users based on the users' identities, the document having multiple renditions, the access policies applying to the document and the multiple renditions of the document;

authenticate the user at the document management system[[,]] to verify that the user is authorized to access the electronic document; wherein,

when the user is authorized to access the electronic document,

create, at the document management system, an encrypted rendition of the electronic document using the rendition of the electronic document that is stored in the document repository;

create, at the document management system, a voucher for accessing the encrypted rendition, the voucher including a set of access policies for controlling access to the encrypted rendition of the electronic document, the set of access policies including access policies for a plurality of users, the voucher further including an electronic key operable to decrypt an encrypted rendition of the electronic document; and

pass the <u>encrypted rendition of the electronic document and the</u> electronic voucher to the user location.

Serial No.: 10/659,874 Filed: September 9, 2003

Page : 14 of 22

55. (New) A system, comprising:

means for receiving at a document management system a request from a first user for an electronic document at a first user location, the document management system storing a rendition of the electronic document in a document repository, the document management system maintaining a set of access policies for the electronic document, the set of access policies including access policies for a plurality of users, each user having an identity on the document management system, the document management system authenticating users based on the users' identities, the document having multiple renditions, the access policies applying to the document and the multiple renditions of the document;

means for authenticating the first user at the document management system using the set of access policies for the electronic document,

means for verifying that the first user is authorized to obtain the electronic document, and then passing an encrypted rendition of the electronic document to the first user;

means for receiving at the document management system a request from a second user for access to the encrypted rendition, where the second user received the encrypted rendition from the first user:

means for authenticating the second user at the document management system using the set of access policies to establish which operations the second user is allowed to perform on the encrypted rendition;

means for creating, at the document management system, a voucher for accessing the encrypted rendition, the voucher including the set of access policies for controlling access to the encrypted rendition of the electronic document, the voucher further including an electronic key operable to decrypt the encrypted rendition of the electronic document; and

means for passing the electronic voucher to the second user located at a second user location.

56. (New) The system of claim 55, further comprising:

means for creating, at the document management system, the encrypted rendition using the rendition that is stored in the document repository.

Serial No.: 10/659,874 Filed: September 9, 2003

Page : 15 of 22

57. (New) The system of claim 55, wherein creating a voucher comprises:

obtaining the set of access policies for the second user from an access control list that is associated with the electronic document; and

including the obtained set of access policies in the electronic voucher.

58. (New) The system of claim 55, wherein the set of access policies for the electronic document identify one or more of the following operations:

adding content to the rendition, adding comments to the rendition, applying a digital signature to the rendition, saving the rendition, printing the rendition, importing form data into the rendition, exporting form data from the rendition, and transmitting the rendition to another user.

- (New) The system of claim 55, where the set of access policies include:
 a list of application rights.
- 60. (New) The system of claim 55, further comprising:

means for including expiration information in the electronic voucher prior to passing the electronic voucher to the second user location.

- 61. (New) The system of claim 60, wherein the expiration information includes one or more of: a predetermined number of access operations before the voucher expires, a particular time period before the voucher expires, and a particular time when the voucher expires.
- 62. (New) The system of claim 56, wherein:

providing the encrypted rendition includes providing the encrypted rendition from a location other than the document repository.

- 63. (New) The system of claim 55, wherein the rendition is a Portable Document Format document.
- 64. (New) The system of claim 55, further comprising: means for recording information relating to the request in an audit trail for the electronic

Serial No.: 10/659,874 Filed: September 9, 2003

Page : 16 of 22

document.

65. (New) The system of claim 55, wherein the first user and the second user are the same individual.

66. (New) The system of claim 55, wherein the first user location and the second user location are identical.

67. (New) A system, comprising:

means for requesting, from a document management system, access to an electronic document for a user at a user location, one or more renditions of the electronic document being stored in a document repository in the document management system, the document management system maintaining a set of access policies for the electronic document, the set of access policies including access policies for a plurality of users each user having an identity on the document management system, the document management system authenticating users based on the users' identities, the document having multiple renditions, the access policies applying to the document and the multiple renditions of the document, wherein requesting access to an electronic document for a user at a user location includes providing authentication information to authenticate the user to the document management system;

means for receiving at the user location an electronic voucher from the document management system for the electronic document, the electronic voucher including a set of access policies for accessing an encrypted rendition of the electronic document, the set of access policies including access policies for a plurality of users, and an electronic key operable to decrypt the encrypted rendition of the electronic document; and

means for using the electronic key of the electronic voucher at the user location to decrypt the encrypted rendition of the electronic document according to the set of access policies for accessing the encrypted rendition of the electronic document.

68. (New) The system of claim 67, further comprising:

means for determining whether the encrypted rendition of the electronic document is available at the user location;

Serial No.: 10/659,874 Filed: September 9, 2003

Page : 17 of 22

wherein, if it is determined that the encrypted rendition is available at the user location, requesting access includes:

extracting from the encrypted rendition a reference to the document repository where one or more renditions of the electronic document are stored; and

requesting access to the rendition from the document repository identified by the extracted reference.

69. (New) The system of claim 68, wherein:

the encrypted rendition includes a document identifier and the reference to the document repository includes a path for accessing the document repository over a computer network; and requesting access includes:

retrieving the document identifier and the path from the encrypted rendition; and sending an access request to the document repository specified by the retrieved path, the access request including the document identifier.

70. (New) The system of claim 67, wherein the set of access policies include information indicating that a user at the user location is authorized to perform one or more of the following operations:

adding content to the electronic document, adding comments to the electronic document, applying a digital signature to the electronic document, saving the electronic document, printing the electronic document, importing form data into the electronic document, exporting form data from the electronic document, and transmitting the electronic document to another user.

71. (New) The system of claim 67, further comprising:

means for verifying, at the user location, that one or more requested operations are allowed by the set of access policies for the electronic document.

72. (New) The system of claim 67, wherein:

the electronic voucher further includes a set of application rights, the application rights being operable to enable one or more disabled operations in an electronic document software application at the user location.

Serial No.: 10/659,874 Filed: September 9, 2003

Page : 18 of 22

73. (New) The system of claim 67, wherein the rendition is a Portable Document Format document.

74. (New) The system of claim 67, further comprising:

means for storing the received voucher at the user location.

75. (New) The system of claim 67, wherein receiving an electronic voucher comprises: determining whether an electronic voucher is stored locally at the user location; and if the electronic voucher is stored locally, retrieving the electronic voucher from the local storage:

if the electronic voucher is not stored locally, requesting an electronic voucher from the document management system.

76. (New) The system of claim 67, further comprising:

means for receiving an encrypted rendition of the electronic document.

77. (New) The system of claim 67, wherein:

the voucher includes expiration information including one or more of: a predetermined number of access operations before the voucher expires, a particular time period before the voucher expires, and a particular time when the voucher expires.

78. (New) A system, comprising:

means for receiving at a document management system a request from a user for access to an electronic document at a user location, a rendition of the electronic document being stored in a document repository in the document management system, the document management system maintaining a set of access policies for the electronic document, the set of access policies including access policies for a plurality of users, each user having an identity on the document management system, the document management system authenticating users based on the users' identities, the document having multiple renditions, the access policies applying to the document and the multiple renditions of the document;

means for authenticating the user at the document management system to verify that the user is authorized to access the electronic document; wherein,

Serial No.: 10/659,874 Filed: September 9, 2003

Page : 19 of 22

when the user is authorized to access the electronic document, the system further comprises:

means for creating, at the document management system, an encrypted rendition of the electronic document using the rendition of the electronic document that is stored in the document repository;

means for creating, at the document management system, a voucher for accessing the encrypted rendition, the voucher including a set of access policies for controlling access to the encrypted rendition of the electronic document, the set of access policies including access policies for a plurality of users, the voucher further including an electronic key operable to decrypt an encrypted rendition of the electronic document; and

means for passing the encrypted rendition of the electronic document and the electronic voucher to the user location.